I. LAURI.

FLOOR CLAMPING DEVICE.

APPLICATION FILED MAY 12, 1913.

1,094,449.

Patented Apr. 28, 1914.

Fig. 1.

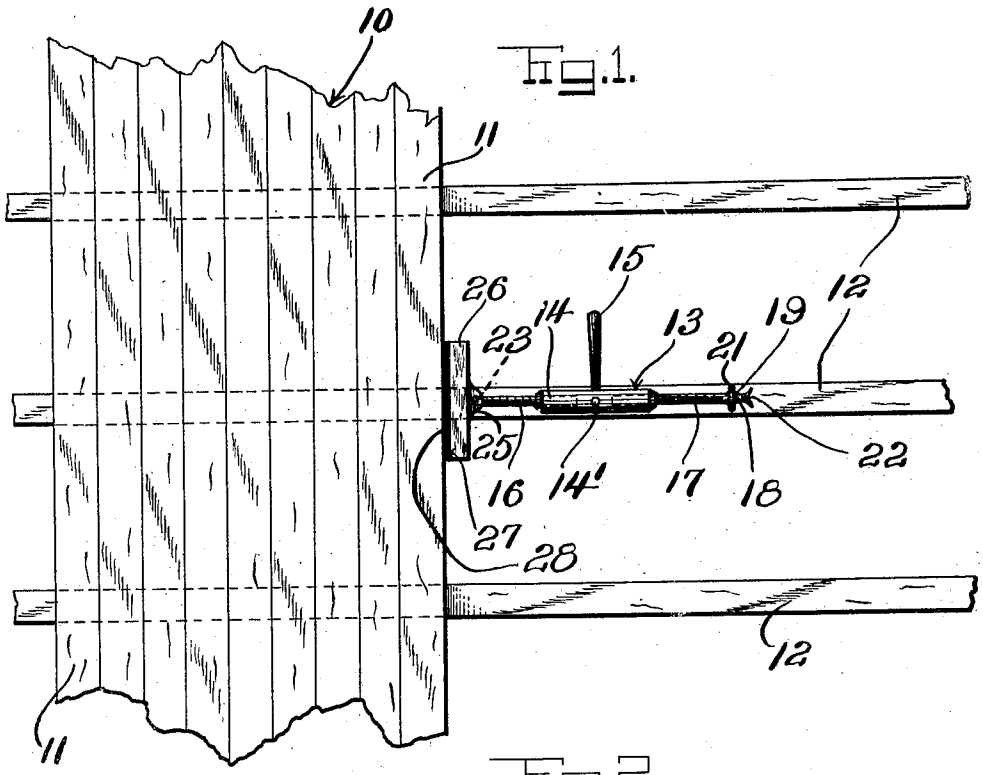


Fig. 2.

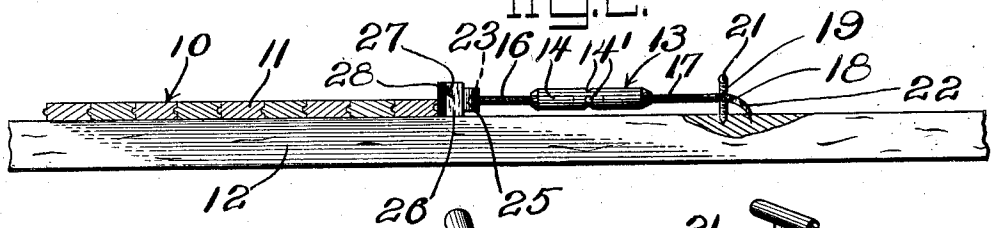


Fig. 3.

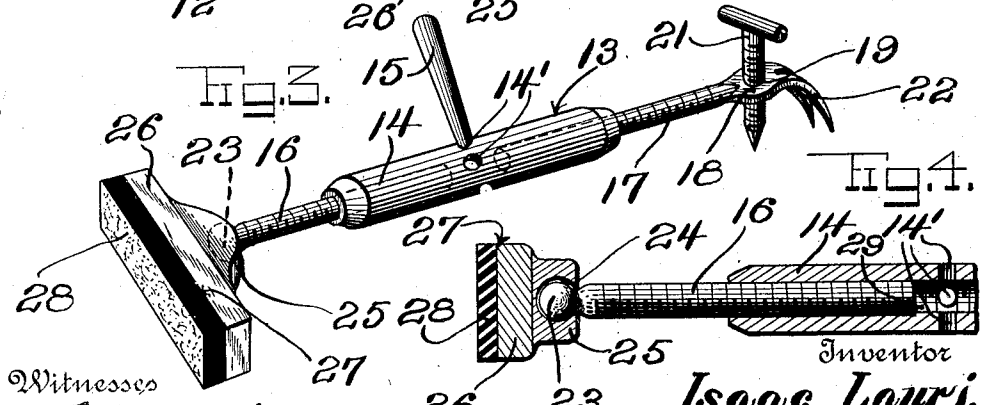


Fig. 4.

Witnesses

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FLOOR-CLAMPING DEVICE.

1,094,449. Specification of Letters Patent. Patented Apr. 28, 1914.

Application filed May 12, 1913. Serial No. 767,125.

To all whom it may concern:

Be it known that I, ISAAC LAURI, a citizen of the United States, and residing at Floodwood, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Floor-Clamping Devices, of which the following is a specification.

The invention relates to new and useful improvements in floor clamping devices, and more particularly to that class used by building mechanics.

An object of this invention is to provide a device of this character which when applied to a supporting beam of a flooring or the like, will retain the boards to be secured thereto in position until the mechanic has securely fastened the same.

A further object of this invention is to improve and simplify devices of this character, rendering them reliable and efficient in use, simple and inexpensive to manufacture, and readily operated.

A still further object of this invention is to supply a floor clamping device with a locking means in the form of a removable handle, which can be readily removed from the device after the same is in its desired position, thus locking the device substantially in position, until the handle is again applied.

With the above and other objects in view this invention resides in the novel features of construction, formations, combinations and arrangements of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawings in which:—

Figure 1, is a top plan view of my device applied to a floor, Fig. 2, is a side elevation of the same, Fig. 3, is a perspective of my device removed from the flooring and, Fig. 4, is a fragmentary longitudinal sectional view of the same.

Referring to the accompanying drawings by characters of reference, the numeral 10 designates generally a portion of a flooring comprising the customary boards 11 and supporting beams 12, upon which my device 13 is secured and operated.

The device 13 consists of a tubular casing 14 having formed in its center and running transverse of the casing, four suitably spaced apertures 14′ for the reception of a removable handle 15, while through the entire length of the casing runs a threaded bore 26. The threads of this bore starting from opposite ends and terminating in advance of the transverse apertures 14. These threads being left hand and right hand threads to correspond with those formed upon the threaded rods 16 and 17 in order so that when the device is being operated both rods 16 and 17 will feed into or out of the threaded bore in opposite directions. The rods 16 and 17 are of the same thickness, but both terminate differently, the rod 17 having formed at one end an enlarged plate portion 18 having an aperture 19 formed in the center thereof through which passes a threaded key 21 which has a pointed end formed thereon which penetrates the supporting beam 12 of the flooring 10 when the said key 21 is turned, and the device is in operation, while the plate portion 18 of the rod 17 terminates into a forked end 22 having two pointed ends formed thereon for a similar purpose to that of the pointed key 21. The rod 16 terminates into a swivel head 23 which operates in a socket 24 formed in an extension 25 secured by any suitable means to a block 26, which also has secured to its outer face 27 a rubber pad 28 to protect the device when in operation from disfiguring the contacting edges of the flooring.

It should be understood in this connection that various minor changes in the details of construction, can be resorted to within the scope of the appended claims, without departing from or sacrificing any of the advantages of the invention.

The operation of my device is as follows:—The clamp is set upon the beam and the fork having two sharp points formed thereon immediately penetrates into the supporting beam which in most cases is made of soft wood such as pine or the like. The handle is then grasped and the operator turns the same until the rubber pad contacts with the edges of the boards forming the flooring then the operator tightens down on the threaded key which immediately sinks its pointed end into the supporting beam, and in combination with the pointed fork there is produced a very substantial backing for the device to work on. The operator then continues to operate the handle until the desired results are obtained, and to remove the device he just reverses the operation, and the clamp is free, and ready to be taken apart and packed away if so desired.

From the foregoing disclosure, it will be manifest that a floor clamping device of the character described is provided, which can

be readily taken apart and packed away should its services not be required for any length of time, and which will fulfil all of the necessary requirements of such a device.

Having thus fully described this invention what I claim as new and desire to protect by Letters Patent is:—

1. In a clamp, a tubular casing having transverse apertures and a threaded bore formed therein, rods operating in the said bore, a block secured to one of the rods, a plate terminating into a fork having an aperture formed therein and formed upon the other rod, a pointed key operating in the said aperture, and a removable handle as operating means for the device.

2. In a clamp, a tubular casing having transverse apertures and a threaded bore formed therein, rods operating in the threaded bore, a block secured to one of the rods, a pad secured to the block, a plate having a threaded aperture formed therein and terminating into a fork and formed upon the other rod, a pointed key operating in the said aperture, and a removable handle as operating means for the device.

3. In a clamp, a tubular casing having transverse apertures formed therein, and a bore consisting of left and right hand threads, rods operating in the said bore and having corresponding threads formed thereon, a rod terminating into a swivel head, a block having a socket formed therein for the reception of the said swivel head, a plate terminating into a fork having an aperture formed therein and formed upon another rod, and a removable handle as operating means for the device.

In testimony whereof I affix my signature in presence of two witnesses.

ISAAC LAURI.

Witnesses:
E. B. ROBINSON,
C. A. ROBINSON.